

**Description of the Previously Unknown Female
of *Neurotoma willi* Middlekauff
(Hymenoptera: Pamphiliidae)**

WOODROW W. MIDDLEKAUFF
UNIVERSITY OF CALIFORNIA, BERKELEY

Abstract The original description of *Neurotoma willi* was based upon a single male collected at Huntingdon, Pennsylvania in 1934. This paper describes the previously unknown female which was collected at Ithaca, New York in May, 1965.

In a recent shipment of *Neurotoma* sent to me for identification by Dr. W. L. Brown of Cornell were six males and one female of the previously unique *Neurotoma willi* Middlekauff. These were part of a collection of over 100 males and 3 females made in Professor J. Chester Bradley's garden in early May, 1965. The adults were swarming on and around an ornamental hawthorn, *Crataegus* sp.

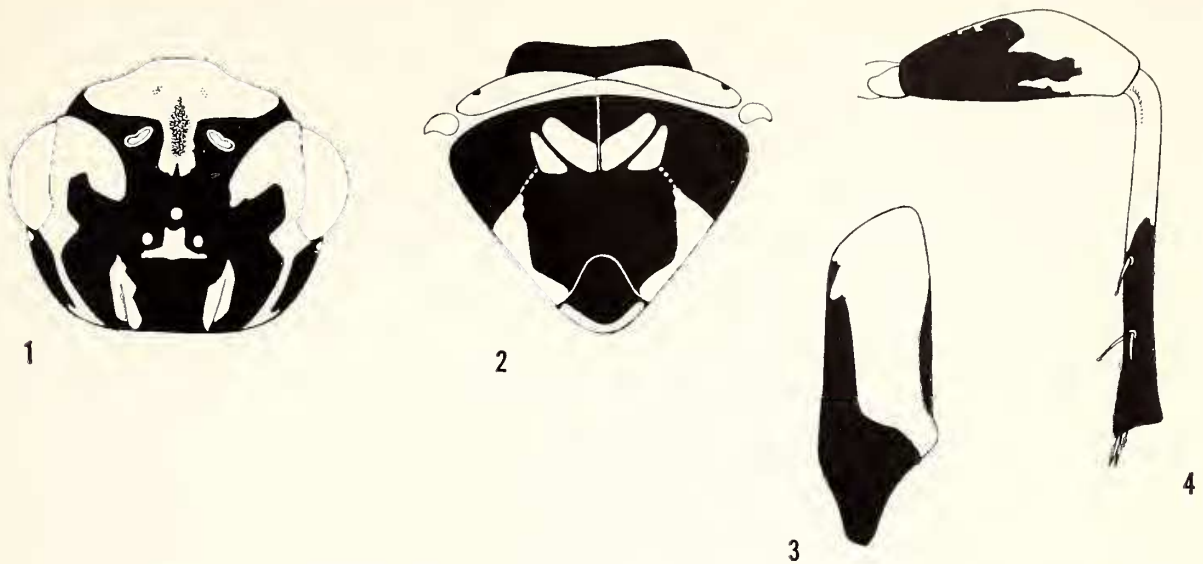
The original description (Middlekauff, 1958) was based upon a single male from Huntingdon, Pennsylvania, collected May 4, 1934, by Dr. Homer C. Will. The new collection by Dr. Brown and his colleagues extends the known range approximately 175 miles north. The description of the female follows:

FEMALE (PREVIOUSLY UNDESCRIBED)

Head, antennae, thorax, wing veins, legs, and abdomen shining black with the exception of the following white areas: a narrow line on outer face of mandibles; an extensive area on clypeus which extends high on the frons, a dark area on mid-frons; para-antennal field, extending as a narrow line along inner margin of eye to the supraocular spot; an inverted T-shaped area in ocellar area; an elongate spot on each lateral suture; gena and extending as a narrow line along occiput to lateral suture, with a narrow line projecting forward to postocular spot; a narrow, shallow, inverted V-shaped line on posterior margin and vertex (Fig. 1); a large triangle on posterior margin of each side of the pronotum, each with a small black dot; ventral half of lateral pronotum; an elongate spot on each cervical sclerite; tegulae; basal portion of wing veins; posterior half of prescutum; a small triangle on adjacent mesoscutum, faintly connected as a narrow line to another, slightly larger triangle on the posterior lateral margin; a line on posterior margin of mesoscutellum (Fig. 2); a large spot on mesepisternum (Fig. 3) and metepisternum; apical half of hind coxa; trochanter; apical half of hind femur (Fig. 4); basal half of hind tibia; corresponding areas on front and midlegs less extensive; apical half of abdominal sternites and a somewhat triangular spot on lateral margin of each abdominal tergite becoming increasingly larger from I-VI, much smaller on VII and VIII. The cutting edges of the mandibles reddish brown, the basal half black. Wing membrane hyaline.

Clypeus rounded in front. Frons swollen, forming an elongate, rounded ridge extending onto the swollen clypeus. Median fovea present, minute. Head including transocellar area mostly smooth, shining, not rugose. Vertex and postocular areas nearly impunctate, finely pebbled. Coronal suture indistinct. Postgenal carina present. Antenna with 19 segments.

Length of scape 0.7 mm; segment three 0.8 mm; segments four plus five 0.6 mm. Length of body 7.7 mm; length of forewing 7.9 mm; width of head 2.6 mm; width of abdomen 3.0 mm.



FIGS. 1-4. *Neurotoma willi* Middlekauff, female, details of color pattern. Fig. 1. Head. Fig. 2. Dorsal aspect of thorax. Fig. 3. Lateral aspect of mesepisternum. Fig. 4. Lateral aspect of hind femur and tibia.

Specimens were collected at Cayuga Heights, Tompkins Co., New York, 100 ♂♂, 3 ♀♀, V-5-65, on and around *Crataegus* (Bradley, Brown, Dalgleish collectors).

The additional males agree remarkably well with the original description of the holotype male.

The female may be easily separated from the closely related *crataegi* by the more swollen frons, minute median fovea, the smooth shining head, hyaline wing membrane, antenna with 19 segments, and the extensive white pattern on the legs, especially the hind pair. Specimens will be found in the collections of the author and Cornell University.

Literature Cited

- MIDDLEKAUFF, WOODROW W. 1958. The North American sawflies of the genera *Acantholyda*, *Cephalcia* and *Neurotoma*. Univ. Calif. Publ. Entom. **14**(2): 51-174.

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